Listing of Claims

1. (Currently Amended) A digital video data outputting apparatus in a display appliance, comprising:

data converters ~~converting units~~ for converting different ~~various types of~~ analog video signals into digital video data respectively;

an output signal selector for receiving outputs of the data converters ~~converting units~~ and selecting any one of the received outputs; [[and]]

an encoder ~~encoding unit~~ for encoding the output of the output signal selector; and

a digital visual interface (DVI) decoder for receiving and decoding DVI video data output from the encoder.

2. (Currently Amended) The digital video data outputting apparatus as claimed in claim 1, wherein any one of the data converters includes ~~converting units is~~ a video decoder for decoding a TV signal.

3. (Currently Amended) A ~~The~~ digital video data outputting apparatus ~~as claimed in claim 1~~ in a display appliance, comprising:

data converters for converting different analog video signals into digital video data respectively;

an output signal selector for receiving outputs of the data converters and selecting any one of the received outputs; and

an encoder for encoding the output of the output signal selector, wherein any one of the data converters ~~converting units~~ includes:

a video decoder for decoding a TV signal, and

a color coordinate transformer ~~transforming unit~~ for transforming an output of the video decoder into digital RGB data to apply the data to the output signal selector.

4. (Currently Amended) The digital video data outputting apparatus as claimed in claim 1, wherein any one of the data converters includes ~~converting units~~ is a component processor for receiving and processing a DVD signal.

5. (Currently Amended) A ~~The~~ digital video data outputting apparatus ~~as claimed in claim 1~~ in a display appliance, comprising:

data converters for converting different analog video signals into digital video data respectively;

an output signal selector for receiving outputs of the data converters and selecting any one of the received outputs; and

an encoder for encoding the output of the output signal selector, wherein any one of the data converters ~~converting units~~ includes:

a component processor for receiving and processing a DVD signal, and

a color coordinate transformer ~~transforming unit~~ for transforming an output of the component processor ~~video decoder~~ into digital RGB data to apply the transformed data to the output signal selector.

6. (Currently Amended) The digital video data outputting apparatus as claimed in claim 1, wherein any one of the data converters includes ~~converting units~~ is an A/D converter for receiving and decoding an analog RGB signal into digital RGB data.

7. (Canceled)

8. (Currently Amended) A ~~The~~ digital video data outputting apparatus ~~as claimed in claim 1~~ in a display appliance, ~~further~~ comprising:

data converters for converting different analog video signals into digital video data respectively;

an output signal selector for receiving outputs of the data converters and selecting any one of the received outputs;

an encoder for encoding the output of the output signal selector; and

a selecting circuit ~~unit~~ for selecting ~~any one of the outputs~~ an output of one of the data converters for display ~~converting units to display the selected output~~, ~~and~~ wherein a signal based on

the output selected by the selecting circuit is input into ~~applying the selected output to~~ the output signal selector.

9. (Currently Amended) The digital video data outputting apparatus as claimed in claim 1 [[7]], further comprising:

a selecting circuit ~~unit~~ for selecting ~~any one of the outputs of the data converting units and~~ an output of the DVI decoder or an output of one of the data converters for display ~~to display the selected output~~, wherein a signal based on the output selected by the selecting circuit is input ~~and applying the selected output~~ into the output signal selector.

10. (Currently Amended) The digital video data outputting apparatus as claimed in claim 9, wherein a plurality of selecting circuits ~~units~~ are provided to select one of the ~~according to characteristics of~~ outputs of the data converters or an output ~~converting units and an output~~ of the DVI decoder.

11. (Currently Amended) The digital video data outputting apparatus as claimed in claim 8 ~~or 9~~, further comprising:

a scaler connected between the selecting circuit ~~unit~~ and output signal selector for scaling an output of the selecting circuit, the scaler ~~unit~~ to apply the scaled output to the output signal selector.

12. (Currently Amended) A digital video data outputting apparatus in a display appliance, comprising:

one or more first data converters ~~converting units~~ for converting ~~some of various kinds~~ a first plurality of analog video signals into digital video data;

a signal detector for detecting an input state ~~states~~ of video signals inputted to at least one of the first data converters ~~converting units~~;

a switching unit for receiving video data outputted from the first data converters ~~converting units~~ and selecting ~~any one of~~ the video data according to the detected result of the signal detector;

second data converters ~~converting units~~ for converting a second plurality ~~the remainder of the various kinds~~ of analog video signals into digital video data;

at least one multiplexer ~~a plurality of multiplexers~~ for selecting ~~some of the~~ video data outputted from the switching unit and the second data converters ~~converting units~~;

a scaler for scaling the digital video data outputted from the at least one multiplexer;

an output signal selector for selecting any one of digital video data outputted from the scaler, the digital video data outputted from one of the first data converters ~~switching unit~~, ~~and~~ or the digital video data outputted from one of the second data converters ~~converting units~~;

a digital visual interface (DVI) encoder for DVI-encoding the digital video data outputted from the output signal selector; and

a controller ~~unit~~ for controlling the output signal selector.

13. (Currently Amended) The digital video data outputting apparatus as claimed in claim 12, further comprising:

a color coordinate transformer ~~transforming unit~~, connected between ~~some~~ one of the second converters ~~data converting units~~ and the output signal selector, for color coordinate transforming an output of said one of the second data converters ~~converting units~~.

14. (Currently Amended) A method for outputting digital video data in a display appliance, comprising ~~the steps of~~:

a) converting video signals inputted to the display appliance into a plurality of digital video data signals of one or more [a] predetermined formats;

b) selecting ~~any~~ one of the digital video data signals and digital visual interface (DVI)-encoding the selected data signal; and

c) outputting the DVI-encoded digital video data signal, wherein b) includes selecting one of the digital video data signals based on whether a predetermined input terminal of the display appliance has received one of said video signals.

15. (Currently Amended) The method for outputting digital video data as claimed in claim 14, further comprising ~~the steps~~:

selecting one or more of the digital video data signals converted into one of the predetermined formats ~~to display the data~~; and

processing the selected digital video data signal to be displayed, wherein ~~the step~~ b) includes selecting ~~selects any one of~~ the processed video data signal or one of ~~and~~ the digital video data signals converted into one of the predetermined ~~given~~ formats.

16. (Currently Amended) The method for outputting digital video data as claimed in claim 15, wherein ~~the step of~~ processing the selected digital video data to be displayed is performed by a scaling process.

17. (Canceled)

18. (Currently Amended) The method for outputting digital video data as claimed in claim 14, wherein the video signals input into the display appliance includes at least one of a TV signal, a DVD signal, an analog RGB signal, or ~~and~~ a DVI video data.

19. (Currently Amended) The method for outputting digital video data as claimed in claim 18, wherein the TV signal is decoded and converted into one of the predetermined ~~given~~ formats of digital video data, the DVD signal is component-processed and is converted into one of the predetermined ~~given~~ formats of digital video data, the analog RGB signal is converted into one of the predetermined ~~given~~ formats of digital video data, and the DVI video data is DVI decoded into ~~be convert into the given format~~ one of the predetermined given formats of digital video data.

20. (Currently Amended) The method for outputting digital video data as claimed in claim 18, further comprising: ~~the step of~~

color-converting ~~the given format of~~ digital video data corresponding to at least one of ~~by converting~~ the TV or the DVD signal, wherein ~~the step~~ b) includes selecting the at least ~~selects any~~ one ~~of the~~ color-converted digital video data signal or ~~and the~~ other ones of the digital video data signals converted in to one of the predetermined ~~given~~ formats.

21. (New) The digital video data outputting apparatus as claimed in claim 12, wherein the first data converters include an analog-to-digital converter and a DVI decoder.

22. (New) The digital video data outputting apparatus as claimed in claim 12, wherein said input state includes one of a first state indicative of no video signals input into said at least one of the first data converters and a second state indicative of the presence of video signals input into said at least one of the first data converters.

23. (New) An apparatus, comprising:

a plurality of converters to convert different analog video signals into respective digital video data signals;

a detector to detect whether a predetermined input terminal of the apparatus has received one of said analog video signals;

a first selector to select one of the digital video data signals based on a first selection signal from the detector; and

an encoder to encode the selected digital video data signal to generate video data in a predetermined format.

24. (New) The apparatus of claim 23, wherein the first selector selects one of the digital video data signals based on the first selection signal and a second selection signal, the second selection signal corresponding to one of the digital video signals output from the converters.

25. (New) The apparatus of claim 24, wherein the first selector selects one of the digital video data signals based on the first selection signal, a second selection signal, and a user enable signal.

26. (New) The apparatus of claim 24, further comprising:

a second selector to select one of the digital video data signals for processing,

wherein the first selector selects one of the digital video data signals or the processed digital video data signal based on the first selection signal.

27. (New) The apparatus of claim 26, wherein the first selector selects one of the digital video data signals or the processed digital video signal based on based on the first selection signal

and a second selection signal, the second selection signal corresponding to one of the digital video signals output from the converters.

28. (New) The apparatus of claim 27, wherein the first selector selects one of the digital video data signals based on the first selection signal, a second selection signal, and a user enable signal.

29. (New) The apparatus of claim 26, wherein said processing includes a scaling operation.

30. (New) The apparatus of claim 23, wherein said predetermined format is a digital visual interface (DVI) format.

31. (New) The apparatus of claim 23, further comprising:

a decoder for decoding the digital video signal output from the encoder for display.

32. (New) The apparatus of claim 31, further comprising:

a second selector to select a signal output of the decoder or a digital video signal output from one of the converters based on the first selection signal, the signal selected by the second selector being processed for display.

33. (New) The apparatus of claim 31, wherein said predetermined format is a digital visual interface (DVI) format and the decoder is a digital visual interface (DVI) decoder.

34. (New) The apparatus of claim 23, wherein at least one of the converters includes:

a video decoder to decode a TV signal, and

a color coordinate transformer to transform an output of the video decoder for input into the first selector.

35. (New) The apparatus of claim 23, wherein one of the converters includes a component processor for processing a DVD signal corresponding to one of the analog video signals.

36. (New) The apparatus of claim 23, wherein one of the converters includes:

a component processor to process a DVD signal corresponding to one of the analog video signals, and

a color coordinate transformer to transform an output of the component processor into digital RGB data for input into the first selector.